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CENTRAL FAX CENTER****MAR 12 2007****"PATENT"****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	)	Before the Examiner
Kim E. Fyfe, et al.	)	John Christopher Douglas
U. S. Serial No. 10/678,457	)	
Filed: October 3, 2003	)	Confirmation Number: 3338
	)	Group Art Unit: 1764
HIGH VISCOSITY-INDEX BASE	)	
STOCKS, BASE OILS AND LUBRICANT	)	Family Number: P2002J109 US2
COMPOSITIONS AND METHODS FOR	)	
THEIR PRODUCTION AND USE	)	

State of New Jersey)
) ss.
County of Gloucester)

Before me, the undersigned authority, personally appeared Eugenio Sanchez, who, being by me duly sworn, deposed as follows:

1. I, Eugenio Sanchez, possess expertise in the field of Chemistry specializing in lubricating oils.
2. I attained the degree of "*Licenciatura de Quimica*" (Bachelor of Science in Chemistry) from the Universidad Simon Bolivar (Caracas, Venezuela) in 1982 and the degree of Doctor of Philosophy in Chemistry from the University of Washington (Seattle, WA) in 1987.
3. I was employed by Mobil Research and Development Company (a Division of Mobil Oil) from 1989 - 1996 doing Spectroscopy and Chemometrics research, at the Paulsboro Technical Center. I then transferred to the lubricant products division for Mobil Research and Technology Company, and worked in lubricant base stock and finished product performance modeling for band a Group Leader developing processes for the commercialization of high quality lubricant additives and synthetic fluids, and have worked at their facility in Paulsboro, New Jersey until now.
4. I worked with lubricant additives, lubricant base stocks, lubricant synthetic base stocks, finished lubricants and fuels and fuel components. I am in particular an expert in lubricant base stock property characterization, modeling, and prediction. I have in particular studied the properties of hydroprocessed base oils in detail, and led the Products hydroprocessed base oil quality research team in 1998-1999. I am also an expert in chemometrics, and lubricant formulation research using high throughput experimentation.

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5. During my professional career with ExxonMobil, I was an inventor or co-inventor of two U.S. Patents dealing primarily with Petroleum Products and the development, formulation and use of lubricant and fuel products.
6. This affidavit is in regards to U.S. Patent Application No. 10/678,457 (the "Application").
7. In regards to the Application, I disclose the following information regarding the Application.
8. The examples the Examiner cites from Berlowiz are solvent dewaxed lubricants.
9. The claims in the Application are limited to a base stock with a ratio of measured-to-theoretical low-temperature viscosity less than 1.2 at a temperature of about -30°C or lower. In one embodiment, and in the dependant claims, this is accomplished through hydrodewaxing.
10. Lubricants produced through solvent dewaxing and hydrodewaxing provide different properties.
11. Table 1 is a chart of a comparative test of Group 3 base stocks. Base Stock A is a hydrodewaxed base stock and Base Stock B is a solvent base stock. As can be seen in table 1 both Base Stock A and Base Stock B were blended to have a nearly identical viscosity. While both base stocks have nearly identical CCS at -20°C, the CSS at -30°C and -35°C differ dramatically. This data shows that a similar CCS value at -20°C cannot be extrapolated to -30°C. In addition, the solvent dewaxed comparative sample that matches the disclosure in Berlowitz would have a ratio of measured-to-theoretical low-temperature viscosity of greater than 1.2 at a temperature of about -30°C or lower and thus be outside the claimed range.